

Date: Sun, 28 Feb 93 04:30:18 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #267
To: Info-Hams

Info-Hams Digest Sun, 28 Feb 93 Volume 93 : Issue 267

Today's Topics:

 ARRL BULLETIN 14 ARLB014
 Daily Solar Geophysical Data Broadcast for 25 February
 Daily Solar Geophysical Data Broadcast for 26 February
 Daily Solar Geophysical Data Broadcast for 27 February
 DESPERATE...NEED TO KNOW FACTS CONCERNING LEGALITY
 Study Guides in electronic form

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Sun, 28 Feb 93 03:34:27 GMT
From: usc!zaphod.mps.ohio-state.edu!mstar!n8emr!bulletin@network.UCSD.EDU
Subject: ARRL BULLETIN 14 ARLB014
To: info-hams@ucsd.edu

=====
| Automatic relayed from packet radio via |
| N8EMR's Ham BBS, 614-895-2553 |
=====

ZCZC AG55
QST DE W1AW
ARRL BULLETIN 14 ARLB014
FROM ARRL HEADQUARTERS
NEWINGTON CT FEBRUARY 8, 1993
TO ALL RADIO AMATEURS

SB QST ARL ARLB014
ARLB014 BILL PROTECTS AMATEURS

A TELECOMMUNICATIONS BILL TO FREE UP GOVERNMENT SPECTRUM FOR COMMERCIAL USE, INTRODUCED INTO THE NEW U.S. CONGRESS, CONTAINS IMPORTANT PROTECTIONS FOR RADIO AMATEURS. THE BILL, S. 335, IS A REVISED VERSION OF S. 218, WHICH WAS NOT ACTED UPON IN THE LAST CONGRESS.

DURING THE LAST, 102ND, CONGRESS, THE ARRL SUGGESTED SIX POSSIBLE AMENDMENTS TO S. 218 TO MITIGATE THE EFFECT OF RELEASING FOR PRIVATE USE GOVERNMENT FREQUENCIES, SOME OF WHICH RADIO AMATEURS OCCUPY ON A SHARED, SECONDARY, NON-INTERFERENCE BASIS. FIVE OF THESE SIX PROPOSED AMENDMENTS WERE INCORPORATED INTO S. 335.

SENATOR DANIEL INOUE (D-HI) INTRODUCED S. 335, 'THE EMERGING TELECOMMUNICATIONS TECHNOLOGIES ACT OF 1993,' ON FEBRUARY 4, SAYING:

'SENATOR STEVENS' (CO-SPONSOR FROM ALASKA) 'AND I HAVE INCORPORATED SOME CHANGES TO ACCOMMODATE CONCERNS OF THE AMATEUR RADIO INDUSTRY. I AM HAPPY TO INCLUDE THESE CHANGES IN ORDER TO PROTECT THE RIGHTS OF AMATEUR RADIO USERS TO THEIR SPECTRUM.'

THE CHANGES MADE AS A RESULT OF THE ARRL INITIATIVE ARE AS FOLLOWS:

1. THE BILL MAKES A 'FINDING' THAT 'A REASSIGNMENT OF FEDERAL GOVERNMENT FREQUENCIES CAN BE ACCOMPLISHED WITHOUT ADVERSE IMPACT ON AMATEUR RADIO LICENSEES THAT CURRENTLY SHARE ALLOCATIONS WITH FEDERAL GOVERNMENT STATIONS.'
2. IN DETERMINING WHETHER A FREQUENCY REALLOCATION IS FEASIBLE, THE SECRETARY OF COMMERCE SHALL 'SEEK TO AVOID EXCESSIVE DISRUPTION OF EXISTING USE OF FEDERAL GOVERNMENT FREQUENCIES BY AMATEUR RADIO LICENSEES.'
3. ONE BASIS TO BE USED IN DETERMINING WHETHER COMMERCIAL USE OF A FREQUENCY IS FEASIBLE IS TO BE 'THE EXTENT TO WHICH COMMERCIAL USERS CAN SHARE THE FREQUENCY WITH AMATEUR RADIO LICENSEES.'
4. THE ADVISORY COMMITTEE CONVENED TO REVIEW AND ADVISE UPON THE SECRETARY'S REPORT SHALL INCLUDE REPRESENTATIVES OF 'OTHER USERS OF THE ELECTROMAGNETIC SPECTRUM, INCLUDING RADIO AND TELEVISION BROADCAST LICENSEES, STATE AND LOCAL PUBLIC SAFETY AGENCIES, AMATEUR RADIO LICENSEES, AND THE AVIATION INDUSTRY.'
5. THE PRESIDENT MAY, ON CERTAIN GROUNDS, SUBSTITUTE ALTERNATIVE FREQUENCIES OR BANDS FOR THOSE CHOSEN. AMONG THE GROUNDS ON WHICH HE MAY ACT IS 'THE REASSIGNMENT WILL DISRUPT THE EXISTING USE OF A

FEDERAL GOVERNMENT BAND OF FREUENCIES BY AMATEUR RADIO LICENSEES.'

6. COMPETITIVE BIDDING AUTHORITY GIVEN THE FCC UNDER THIS ACT ''SHALL NOT EXTEND TO ... AMATEUR OPERATOR SERVICES....''

''THESE CHANGES GO A LONG WAY TOWARD ADDRESSING AMATEURS' CONCERNS ABOUT THIS LEGISLATION, AND CLEARLY ESTABLISH THAT OUR NEEDS MUST BE CONSIDERED AS THE BILL PROCEEDS THROUGH THE CONGRESS,'' ARRL EXECUTIVE VICE PRESIDENT DAVID SUMNER, K1ZZ SAID.
NNNN

Date: 28 Feb 93 04:38:33 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 25 February
To: info-hams@ucsd.edu

NOTE: DATA FOR THIS UT DAY WAS NOT AVAILABLE FOR INCLUSION IN THIS REPORT
DUE TO A SCHEDULED POWER OUTAGE. SOME DATA MAY BE INACCURATE.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 056, 02/25/93
10.7 FLUX=128.0 90-AVG=135 SSN=124 BKI=0332 2210 BAI=006
BGND-XRAY=B3.0 FLU1=1.8E+06 FLU10=1.3E+04 PKI=0332 2211 PAI=008
BOU-DEV=***,***,***,***,***,***,***,*** DEV-AVG=*** NT SWF=00:000
XRAY-MAX= C8.4 @ 0551UT XRAY-MIN= B2.4 @ ****UT XRAY-AVG= B4.0
NEUTN-MAX= ****% @ ****UT NEUTN-MIN= ****% @ ***OUT NEUTN-AVG= ****%
PCA-MAX= ****DB @ ****UT PCA-MIN= ****DB @ ****UT PCA-AVG= ****DB
BOUTF-MAX=*****NT @ ****UT BOUTF-MIN=*****NT @ ****UT BOUTF-AVG=*****NT
GOES7-MAX=P:****NT@ ****UT GOES7-MIN=N:****NT@ ****UT G7-AVG=****,****,****
GOES6-MAX=N:****NT@ ****UT GOES6-MIN=E:****NT@ ****UT G6-AVG=****,****,****
FLUXFCST=STD:125,120,125;SESC:125,120,125 BAI/PAI-FCST=010,020,020/015,020,020
KFCST=1112 3212 2344 4432 27DAY-AP=004,009 27DAY-KP=0121 1212 2313 2223
WARNINGS=
ALERTS=
!!END-DATA!!

Date: 28 Feb 93 05:47:04 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 26 February
To: info-hams@ucsd.edu

NOTE: DATA FOR THIS UT DAY WAS NOT AVAILABLE FOR INCLUSION IN THIS REPORT
DUE TO A SCHEDULED POWER OUTAGE. SOME DATA MAY BE INACCURATE. THIS
SHOULD BE THE LAST DAY OF UNAVAILABLE DATA.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 057, 02/26/93
10.7 FLUX=126.2 90-AVG=134 SSN=118 BKI=0120 2210 BAI=005
BGND-XRAY=B2.5 FLU1=2.0E+06 FLU10=1.4E+04 PKI=0120 2210 PAI=004
BOU-DEV=***,***,***,***,***,***,***,*** DEV-AVG=*** NT SWF=00:000
XRAY-MAX= B7.9 @ 0753UT XRAY-MIN= B2.4 @ ****UT XRAY-AVG= B3.5
NEUTN-MAX= ****% @ ****UT NEUTN-MIN= ****% @ ***0UT NEUTN-AVG= ****%
PCA-MAX= ****DB @ ****UT PCA-MIN= ****DB @ ****UT PCA-AVG= ****DB
BOUTF-MAX=*****NT @ ****UT BOUTF-MIN=*****NT @ ****UT BOUTF-AVG=*****NT
GOES7-MAX=P:****NT@ ****UT GOES7-MIN=N:****NT@ ****UT G7-AVG=****,****,****
GOES6-MAX=N:****NT@ ****UT GOES6-MIN=E:****NT@ ****UT G6-AVG=****,****,****
FLUXFCST=STD:120,125,130;SESC:120,125,130 BAI/PAI-FCST=020,020,020/020,020,025
KFCST=1112 3212 2344 4432 27DAY-AP=009,054 27DAY-KP=2313 2223 3567 5455
WARNINGS=
ALERTS=
!!END-DATA!!

Date: 28 Feb 93 05:17:34 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 27 February
To: info-hams@ucsd.edu

NOTE: NORMAL OPERATIONS HAVE BEEN RESTORED. WE APOLOGIZE FOR THE
INCONVENIENCE THE DATA OUTAGE MAY HAVE CAUSED DURING THE LAST WEEK.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 058, 02/27/93
10.7 FLUX=124.0 90-AVG=134 SSN=122 BKI=0010 1112 BAI=002
BGND-XRAY=B2.3 FLU1=2.2E+06 FLU10=1.5E+04 PKI=1011 1212 PAI=004
BOU-DEV=002,004,005,004,006,006,005,019 DEV-AVG=006 NT SWF=00:000
XRAY-MAX= B7.2 @ 0408UT XRAY-MIN= B2.2 @ 1706UT XRAY-AVG= B3.2
NEUTN-MAX= +004% @ 1735UT NEUTN-MIN= -001% @ 1205UT NEUTN-AVG= +0.7%
PCA-MAX= +0.1DB @ 2355UT PCA-MIN= -0.9DB @ 1930UT PCA-AVG= -0.1DB
BOUTF-MAX=55414NT @ 2359UT BOUTF-MIN=55379NT @ 1906UT BOUTF-AVG=55400NT
GOES7-MAX=P:+127NT@ 2330UT GOES7-MIN=N:+006NT@ 1015UT G7-AVG=+090,+030,+011
GOES6-MAX=P:+125NT@ 2315UT GOES6-MIN=E:-004NT@ 1845UT G6-AVG=+101,+008,+039
FLUXFCST=STD:125,130,135;SESC:125,130,135 BAI/PAI-FCST=020,020,020/020,020,015
KFCST=3445 4433 3445 4433 27DAY-AP=054,024 27DAY-KP=3567 5455 5345 3333
WARNINGS=
ALERTS=
!!END-DATA!!

Date: Thu, 25 Feb 1993 17:45:17 GMT
From: agate!howland.reston.ans.net!zaphod.mps.ohio-state.edu!sdd.hp.com!
hpscit.sc.hp.com!hplextra!hpcc05!hpscit!davea@ames.arpa
Subject: DESPERATE...NEED TO KNOW FACTS CONCERNING LEGALITY

To: info-hams@ucsd.edu

Think about it this way, "If you are in an emergency condition, do you really think that breaking the law is going to matter" Beam me up Scotty!

Maybe the thing to concentrate on is avoiding getting into an emergency.

Date: Sun, 28 Feb 1993 04:05:55 GMT
From: swrinde!cs.utexas.edu!milano!cactus.org!barron@network.UCSD.EDU
Subject: Study Guides in electronic form
To: info-hams@ucsd.edu

I am posting this request for friend studying to get his license. He would like to know if there are any study guides (such as Now You're Talking, etc.) in computer readable form. He has the question pool on disk but would like to work with some more in depth material.

73,
Robert, KA5WSS
barron@cactus.org
--

Robert Barron, KA5WSS-----
P.O. Box 180703 Internet: barron@cactus.org
Austin, TX 78718-0703 Packet: ka5wss@n5ljf.tx.usa.na
(512) 837-4051 AMPR: ka5wss@ka5wss.ampr.org [44.76.1.184]

Date: 28 Feb 1993 04:00:03 -0500
From: digex.com!digex.com!not-for-mail@uunet.uu.net
To: info-hams@ucsd.edu

References <1993Feb22.221517.26@sssup1.sssup.it>, <C350A8.5H1@zoo.toronto.edu>,
<darknite.730869070@camelot>p
Subject : Re: Info needed on GPS

darknite@camelot.bradley.edu (John S. Novak III) writes:
>which blows your accuracy even more. We also have problems due
>to atmospheric interference (ionosphere and troposphere) and
>multipath.

I am curious as to how large a degradation the atmospheric anomalies cause on a satellite-to-water-vessel path.

I assume that the constellation is sufficiently dense to allow three or four satellites to lie on paths forming large

angles with respect to the atmospheric layers, so reflections leading to multiple paths would seem to be negligible. Are problems caused by propagation delays arising from the various atmospheric densities? Something else?

Also, I am curious as to the sources of multi-path interference on a path from an orbiting satellite and an unobstructed water vessel.

"...GPS is NOT an operational system...signed Commander, United States Coast Guard. Out."

Cheers.

--

bote@access.digex.com (John Boteler)

"Why, in an ESS of this size it would take five, six minutes to trace a call!"

Date: Sun, 28 Feb 1993 04:56:55 GMT

From: mentor.cc.purdue.edu!noose.ecn.purdue.edu!pasture.ecn.purdue.edu!

laird@purdue.edu

To: info-hams@ucsd.edu

References <1993Feb22.221517.26@sssup1.sssup.it>, <C350A8.5H1@zoo.toronto.edu>, <darknite.730869070@camelot>cc.purd

Subject : Re: Info needed on GPS

Here's what I have...

--kyler

Bob Dixon's "Spread Spectrum Systems, 2nd ed" (pub Wiley Interscience) has a brief but good overview on page 320-324 of the book. GPS uses spread spectrum techniques.

Basically, when the system is fully activated, there will be at least 3 satellites out of a constellation of 18 that will be "visible" by any earthbound receiver at any given moment (not all satellites are lofted yet, so there are holes). Each satellite broadcasts information on two frequencies--called the L1 and L2 channels.

The main L1 channel contains two pseudo-random codes--the C/A (clear access) and P (protected) codes. The P code is at 10 times the bit rate of the C/A code, and can be encrypted to deny access

End of Info-Hams Digest V93 #267
